Dr. Belinda L. Collins, Chair Interagency Committee on Standards Policy National Institute of Standards and Technology 100 Bureau Drive Building 820, Room 282 Gaithersburg, Maryland 20899-2100

Dear Dr. Collins:

Enclosed is the Nuclear Regulatory Commission's annual report on its participation in the development and use of voluntary consensus standards, as required by OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities." The annual report covers the period October 1, 1999, through September 30, 2000. As requested in your September 11, 2000, memorandum to all Federal agencies, the NRC's report has been posted on the National Institute of Standards and Technology web site.

If you have any questions concerning the enclosed report, please contact Michael E. Mayfield, NRC Standards Executive, at (301)415-5678 or at mem2@nrc.gov.

Sincerely,

/RA/

Nils J. Diaz Acting Chairman

Enclosure: As stated

U.S. Nuclear Regulatory Commission Annual Report for Implementation of P.L. 104-113 and OMB Circular A-119 October 1, 1999 - September 30, 2000

The Nuclear Regulatory Commission (NRC) has been an active participant in the development and use of consensus standards since its establishment in 1975. The Commission's Strategic Assessment and Rebaselining Initiative in 1996 further increased NRC's focus on the use of standards. For nuclear reactor and nuclear materials safety, the strategy is to increase the involvement of licensees and others in the NRC regulatory process consistent with Public Law 104-113, "National Technology Transfer and Advancement Act of 1995" (P. L. 104-113). To do this, NRC will continue to encourage industry to develop codes, standards, and guides that NRC can endorse and the industry can carry out.

In FY 2000, NRC took several actions to increase the effectiveness and efficiency of our process for implementing P. L. 104-113 and OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities." NRC Management Directive 6.5, "NRC Participation in the Development and Use of Consensus Standards," was issued on November 2, 1999. The Directive provides: (1) direction for implementing P. L. 104-113 and OMB Circular A-119; and (2) organizational responsibilities and guidance for NRC staff participating in the development of consensus standards and for NRC use of consensus standards.

The NRC staff met with representatives from the standards development organizations (SDOs) who provide codes and standards for the nuclear industry twice during this reporting period (December 8, 1999, and July 27, 2000). The NRC has been hosting these meetings on a semi-annual basis. The purpose of these meetings is to foster better communication and discuss standards under development, current needs, and priorities. These exchanges have proved to be very beneficial, and the next meeting will be held in January 2001.

The NRC established a standards website during this reporting period:

http://nrcweb.nrc.gov/NRC/REFERENCE/STANDARDS/.

Among other things, the website contains the SDOs with which the agency interfaces, consensus standards used by the NRC, and NRC staff representatives on SDO committees.

The NRC response to the reporting provisions of OMB Circular A-119 is as follows.

1) <u>Identification of all instances when the agency used government-unique standards in lieu of voluntary consensus standards (for each instance include agency rationale for such use, as well as the specific government-unique standard used).</u>

No government-unique standards were used by NRC in lieu of existing voluntary consensus standards.

2) The number of voluntary standards the agency has used since October 1, 1998, based on the procedures set forth in Sections 11 and 12 of the Circular.

A. Standards adopted

During this reporting period, one ANS and one ANSI consensus standard were "incorporated by reference" into NRC regulations (see table below). Thirty standards were endorsed in five final regulatory guides¹ and four standards in one final NUREG² (see table for identification of these standards with the specific method of endorsement). It should be noted that standards which have not been generically approved for use by all licensees have not been listed (i.e., when one licensee requests and receives regulatory approval to use a specific standard).

B. Identify those instances where, consistent with interim guidance, requests were made in proposed rulemaking for public comment on the use of consensus standards or information was provided in the final rulemaking regarding public comment on the use of consensus standards.

Information regarding public comment on the use of consensus standards was provided in the following final rulemaking: "Domestic Licensing of Special Nuclear Material; Possession of a Critical Mass of Special Nuclear Material," 65 FR 56211, September 18, 2000.

3) <u>Identification of voluntary consensus standards that have been substituted for government-unique standards as a result of an agency review under Section 15(b)(7) of the Circular.</u>

No voluntary consensus standards were substituted by NRC for a government-unique standard.

4) The number of voluntary consensus standards bodies in which there is agency participation, as well as the number of agency employees participating.

During FY 1999, 141 NRC staff participated within 18 SDOs on a total of 267 standards writing, consensus, and board-level committees.

5) An evaluation of the effectiveness of Circular A-119 policy and recommendations for any changes.

The policy guidelines provided in OMB Circular A-119 for participating in voluntary consensus standards bodies and using voluntary consensus standards are generally consistent with longstanding NRC practices. The staff believes that these guidelines provide appropriate direction and encouragement for Federal agencies to develop

¹NRC regulatory guides provide methods acceptable to the NRC staff for meeting NRC regulations.

²NUREG-1556, which provides consolidated guidance for material licensees.

internal agency-wide guidelines to implement P. L. 104-113 and OMB Circular A-119. These guidelines also provide sufficient and reasonable flexibility for each agency to make an independent case-by-case determination as to the usability of a particular standard within that agency's scope and responsibility.

Standards Endorsed by NRC October 1, 1999 - September 30, 2000

SDO ¹	Standard Identifier	Year	Title	Method of Endorsement ²
ANS	3.1	1993	Selection, Qualification, and Training of Personnel for Nuclear Power Plants	R.G. 1.8
ANS	8.1	1983	Sealed Radioactive SourcesClassification	10CFR70.61d
ANS	10.4	1987	Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs for the Nuclear Industry	R.G. 1.105
ANSI	N43.6	1997	Nuclear Criticality Safety in Operations with Fissionable Material Outside Reactors	10CFR39.41c and NUREG-1556 Series
ANSI	Z88.2	1992	American National Standard For Respiratory Protection	R.G. 8.15
ANSI	Z88.6	1984	Respirator Use—Physical Qualifications for Personnel	R.G. 8.15
ANSI	N323a	1997	Radiation Protection Instrumentation Test and Calibration	NUREG-1556 Series
ANSI	N42.18	1991	Specification and Performance of On-site Instrumentation for Continuously Monitoring Radioactive Effluents	NUREG-1556 Series
ANSI	N13.1	1991	Document to Sampling Airborne Radioactive Materials in Nuclear Facilities	NUREG-1556 Series
ASTM	D 3843	2000	Standard Practice for Quality Assurance for Protecting Coatings Applied to Nuclear Facilities"	R.G. 1.54
ASTM	D 3911	1995	Standard Test Method for Evaluating Coatings Used in Light-Water Nuclear Power Plants at Simulated Design Basis Accident (DBA) Conditions	R.G. 1.54

SDO ¹	Standard Identifier	Year	Title	Method of Endorsement ²
ASTM	D 5144	2000	Standard Guide for Use of Protective Coating Standards in Nuclear Power Plants	R.G. 1.54
ASTM	D 5139	1996	Standard Specification for Sample Preparation for Qualification Testing of Coatings To Be Used in Nuclear Power Plants	R.G. 1.54
ASTM	D 4082	1995	Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants	R.G. 1.54
ASTM	D 4537	1996	Standard Guide for Establishing Procedures To Qualify and Certify Inspection Personnel for Coating Work in Nuclear Facilities	R.G. 1.54
ASTM	D 5498	1994	Standard Guide for Developing a Training Program for Coating Work Inspectors in Nuclear Facilities	R.G. 1.54
ASTM	D 4227	1995	Standard Practice for Qualification of Coating Applicators for Application of Coatings to Concrete Surfaces	R.G. 1.54
ASTM	D 4228	1995	Standard Practice for Qualification of Coating Applicators for Application of Coatings to Steel Surfaces	R.G. 1.54
ASTM	D 4286	1996	Standard Practice for Determining Coating Contractor Qualifications for Nuclear Powered Electric Generation Facilities	R.G. 1.54
ASTM	D 5163	1996	Standard Guide for Establishing Procedures To Monitor the Performance of Safety Related Coatings in an Operating Nuclear Power Plant	R.G. 1.54
ASTM	D 4541	1995	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers	R.G. 1.54
ASTM	D 3359	1995	Standard Test Methods for Measuring Adhesion by Tape Test	R.G. 1.54
ASTM	D 3912	1995	Standard Test Method for Chemical Resistance of Coatings Used in Lightwater Nuclear Power Plants	R.G. 1.54

SDO ¹	Standard Identifier	Year	Title	Method of Endorsement ²
ASTM	D 5962	1996	Standard Guide for Maintaining Unqualified Coatings (Paints) Within Level Areas of a Nuclear Power Facility	R.G. 1.54
ASTM	D 4538	1995	Standard Terminology Relating to Protective Coating and Lining Work for Power Generation Facilities	R.G. 1.54
IEEE	1050	1996	IEEE Guide for Instrumentation and Control Equipment Grounding in Generating Stations	R.G. 1.180
IEEE	C62.41	1995	IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits	R.G. 1.180
IEEE	C62.45	1992	IEEE Guide on Surge Testing for Equipment Connected to Low-Voltage AC Power Circuits	R.G. 1.180
IEEE	C62.41	1995	IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits	R.G. 1.180
IEEE	C62.45	1992	IEEE Guide on Surge Testing for Equipment Connected to Low-Voltage AC Power Circuits	R.G. 1.180
IEEE	473	1991	IEEE Recommended Practice for an Electromagnetic Site Survey (10 kHz to 10 Ghz)	R.G. 1.180
IEEE	518	1990	IEEE Guide for the Installation of Electrical Equipment to Minimize Noise Inputs to Controllers from External Sources	R.G. 1.180
IEEE	665	1995	IEEE Guide for Generating Station Grounding	R.G. 1.180
ISA	S67.04	1994	Setpoints for Nuclear Safety-Related Instrumentation	R.G. 1.105

1. SDO: Standards Developing Organization

ANS: American Nuclear Society

ANSI: American National Standards Institute
ASME: American Society of Mechanical Engineers
ASTM: American Society for Testing and Materials

HPS: Health Physics Society

IEEE: Institute of Electrical and Electronics Engineers ISA: Instrument Society for Measurement and Control

2. Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants"

10 CFR 70.61, "Domestic Licensing of Special Nuclear Material"

Regulatory Guide 1.105, "Setpoints For Safety-Related Instrumentation"

10 CFR 39.41c, "Licenses and Radiation Safety Requirements for Well Logging"

NUREG-1556, "Consolidated Guidance About Materials Licenses"

Regulatory Guide 8.15, "Acceptable Programs for Respiratory Protection"

Regulatory Guide 1.54, "Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants"

Regulatory Guide 1.180, "Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems